

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

In re Wildfire Safety Division Review of the
Electric Utility 2020 Wildfire Mitigation
Plans Pursuant to Resolution WSD-001.

Wildfire Safety Division Review
2020 Wildfire Mitigation Plans

Order Instituting Rulemaking to Implement
Electric Utility Wildfire Mitigation Plans
Pursuant to Senate Bill 901 (2018).

Rulemaking 18-10-007
(Filed October 25, 2018)

**THE PROTECT OUR COMMUNITIES FOUNDATION
COMMENTS ON THE 2020 WILDFIRE MITIGATION PLANS
PURSUANT TO RESOLUTION WSD-001**

Malinda Dickenson, General Counsel
The Protect Our Communities Foundation
4452 Park Blvd. #202
San Diego, California 92116
Tel: (858) 521-8492
Email: malinda@protectourcommunities.org
Attorney for The Protect Our Communities Foundation

Dated: April 7, 2020

TABLE OF CONTENTS

I.	INTRODUCTION	2
II.	SDG&E FAILS TO IDENTIFY AND CORRECT DEFICIENCIES IN ITS WILDFIRE MITIGATION PLAN.....	3
III.	SDG&E’S METRICS ARE NOT FOCUSED ON REDUCING WILDFIRE RISKS; AND ADDITIONAL FACTS NEED TO BE DEVELOPEd TO ESTABLISH THE EFFECTIVENESS OF ITS PROPOSED WILDFIRE MITIGATION ACTIVITIES.....	6
A.	SDG&E’s Metrics Continue to Fail to Address Outcomes.	7
B.	Verification Cannot Rely WMP Templates Because the WMP Templates Are Restricted to Self-Reporting by the Utilities.....	8
IV.	SDG&E’S APPROACH TO RISK ASSESSMENT AND RISK MITIGATION DOES NOT MEET THE COMMISSION’S MINIMUM RISK ASSESSMENT REQUIREMENTS AND FAILS TO SATISFY SECTION 8386(c)(11).	11
A.	In 2019 The Commission Acknowledged Key Deficiencies in the Utilities’ Initial Risk Assessment That Should Be Fixed in 2020.	12
B.	The 2020 WMP Fails to Remove Shareholder Interests from the Decision-Making Process.	15
C.	SDG&E’s 2020 WMP Failed to Calculate RSEs as Required by D.18-12-014.....	15
D.	SDG&E’s 2020 WMP Fails Transparency Standards.	18
V.	SDG&E’S 2020 WMP MEETS NEITHER THE COMMISSION’S NOR THE STATUTE’S INSPECTION MANDATES.....	19
VI.	SDG&E FAILED TO COMPLY WITH COMMISSION DIRECTIVES AND SECTION 8386 BECAUSE ITS VEGETATION MANAGEMENT PRACTICES ARE UNREASONABLE AND ARE NOT SUPPORTED BY SCIENTIFIC EVIDENCE.....	22
A.	As the Commission Already Found, SDG&E’s 25-Foot Clearance Is Unreasonable Absent Explicit, Science-Based Justification.	23
B.	SDG&E’s Vegetation Management Proposals Contribute to Climate Change Impacts and Violate CEQA.	24
C.	SDG&E’s Vegetation Practices are Not Cost Effective.	25
VII.	SDG&E HAS FAILED TO COMPLY WITH COMMISSION DIRECTIVES BECAUSE ITS HARDENING DECISIONS ARE NOT BASED ON REASONABLE OR PROVEN SAFETY CRITERIA.	28
VIII.	SDG&E’S UNDERGROUNDING PROPOSALS ARE NOT COST-EFFECTIVE OR FOCUSED ON REDUCING RISK IN THE HIGHEST RISK AREAS.....	30

IX.	SDG&E HAS FAILED TO COMPLY WITH THE COMMISSION’S DIRECTIVES AND SECTION 8386 REGARDING ITS DE-ENERGIZATION PRACTICES AND SPECIFICALLY WITH RESPECT TO BACKUP GENERATION.....	35
A.	Considering Fossil Fueled Generators Without Showing That Fossil Fueled Generators Will Not Create Additional Fire Threats Violates D.19-05-039.	36
B.	SDG&E Failed to Calculate Risk Spend Efficiencies for its Generator Programs.	36
C.	SDG&E’s Other Generator Grant Programs are Not Cost Effective Because They Do Not Provide Sufficient Backup Power.	37
D.	SDG&E’s Microgrid’s Proposals are Not Cost-Effective.	38
X.	CONCLUSION.....	39

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

In re Wildfire Safety Division Review of the Electric Utility 2020 Wildfire Mitigation Plans Pursuant to Resolution WSD-001.	Wildfire Safety Division Review 2020 Wildfire Mitigation Plans
Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018).	Rulemaking 18-10-007 (Filed October 25, 2018)

**THE PROTECT OUR COMMUNITIES FOUNDATION
COMMENTS ON THE 2020 WILDFIRE MITIGATION PLANS
PURSUANT TO RESOLUTION WSD-001**

Pursuant to Resolution WSD-001, The Protect Our Communities Foundation (POC) respectfully submits the following comments on the 2020 Wildfire Mitigation Plans (2020 WMPs) by serving them on Caroline Thomas Jacobs, Director of the Wildfire Safety Division, and the service list in R.18-10-007.¹

¹ Resolution WSD-001 (January 16, 2020), p. 3.

I. INTRODUCTION

SDG&E's 2020 WMP fails to address the deficiencies the Commission identified last year with respect to SDG&E's and the other utilities' 2019 WMPs.² Moreover, SDG&E's 2020 WMP proposal continues to fail to meet the statutory requirements that SDG&E "construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment."³ SDG&E's 2020 WMP does not "comply with all applicable rules, regulations, and standards,"⁴ and the Wildfire Safety Division must deny SDG&E's 2020 WMP and require the utility to resubmit its WMP to ensure that SDG&E's proposals will actually prevent or at least mitigate future wildfires and that SDG&E's mitigation proposals will be proven to be effective and cost-efficient.⁵

Below, POC explains that SDG&E's metrics are not focused on reducing wildfires, that SDG&E's approach to risk assessment remains deficient, and that these analytical errors pervade throughout the 2020 WMP. POC also demonstrates that SDG&E's inspection, vegetation management, pole replacement, undergrounding, and de-energization practices continue to be deficient and do little to actually reduce the risk of catastrophic wildfire. SDG&E's 2020 WMP fails to set forth what should be the minimum revisions to its previous WMP which are necessary to correct the deficiencies and directives identified in the Commission's past decisions.

² D.19-05-036, *Guidance Decision on 2019 Wildfire Mitigation Plans Submitted Pursuant to Senate Bill 901* (May 30, 2019); D.19-05-039, *Decision on San Diego Gas & Electric Company's 2019 Wildfire Mitigation Plan Pursuant to Senate Bill 901* (May 30, 2019).

³ Pub. Util. Code, § 8386, subd. (a), added in 2018 by S.B.901, the Legislature's first far-reaching effort to require the utilities to submit and the PUC to verify/confirm that the utilities have developed comprehensive wildfire mitigation and safety plans/proposals.

⁴ Pub. Util. Code, § 8386, subd. (d).

⁵ Pub. Util. Code, § 8386.3, subd. (a).

II. SDG&E FAILS TO IDENTIFY AND CORRECT DEFICIENCIES IN ITS WILDFIRE MITIGATION PLAN.

Section 8386⁶ requires that wildfire mitigation plans include: “A description of the processes and procedures the electrical corporation will use to: (A) Identify any deficiencies in the plan or the plan’s implementation and correct those deficiencies [and] (B) Monitor and audit the implementation of the plan.”⁷ Last year, the Commission identified a number of deficiencies with the utilities’ WMPs, and the Commission directed that WMP review in the then-future should evaluate the effectiveness of each WMP and incorporate the lessons learned during the 2019 WMP review process:

There are limits on what can be accomplished in this proceeding, as the strict statutory deadlines – three months to approve the Wildfire Mitigation Plans, with very limited exceptions – provide little time to evaluate each Plan’s effectiveness. At the same time, this is only the first of what we anticipate will be many Wildfire Mitigation Plan proceedings, so this decision contains many substantive and procedural requirements for future plans based on lessons learned this year.⁸

The Commission identified deficiencies with the utilities 2019 WMPs so serious that the Commission directed the utilities to file additional reports, submit advice letters, collect data, participate in additional workshops, and the Commission initiated a second phase of the proceeding.⁹ These requirements were intended to assist with review of the 2020 WMPs and “to help evaluate the effectiveness of the mitigation measures in [the 2019] WMPs.”¹⁰

⁶ All references are to the Public Utilities Code unless otherwise specified.

⁷ Pub. Util. Code, § 8386, subd. (c)(21)(A), (B).

⁸ D.19-05-036, pp. 4-5; *see also* R.18-10-007, Reporter’s Transcript, February 26, 2019 Prehearing Conference (March 1, 2019), p. 107 (ALJ Allen: “... We certainly don’t expect a perfect outcome given the time frame and the fact that there’s a lot to cover in a short period of time.”).

⁹ D.19-05-036, p. 40-41 (requiring Advice Letters describing concerns about the effectiveness of WMPs); *id.* at 41 (requiring data collection reports); *id.* at 42-43 (requiring additional workshops); R.18-10-007, Assigned Commissioner’s Scoping Memo and Ruling for Phase 2 (September 18, 2019).

¹⁰ D.19-05-036, p. 40.

To date, the Commission has not evaluated the effectiveness of the utilities' 2019 WMPs.¹¹ One of the requirements arising from the Commission-identified deficiencies in the electric utilities' 2019 WMPs was the mandate that the utilities "file two Tier 3 Advice Letters entitled 'Reports on Possible Off Ramps,' describing any concerns about the effectiveness of any program in their individual Wildfire Mitigation Plans."¹² Although the Commission identified a number of deficiencies in SDG&E's WMP, in its Advice Letter SDG&E brashly claimed that it "does not have any specific concerns about the effectiveness of any program in its 2019 WMP."¹³ SDG&E's failure to address the Commission's prior directives persists as particularly egregious because SDG&E's 2019 WMP was the only 2019 WMP that was neither approved nor conditionally approved by the Commission. That the Commission did not approve SDG&E's 2019 WMP when it approved the other the utilities' WMPs is apparent from the plain language of the Commission's decisions on each of the utilities' 2019 WMPs:

The Horizon West Transmission, LLC Wildfire Mitigation Plan is approved.¹⁴

The Trans Bay Cable LLC Wildfire Mitigation Plan is approved.¹⁵

Subject to the reporting, metrics, data and advice letter requirements set forth below, PG&E's Wildfire Mitigation Plan is approved.¹⁶

Subject to the reporting, metrics, data and advice letter requirements set forth below, SCE's WMP is approved.¹⁷

¹¹ D.20-03-004, *Decision on Community Awareness and Public Outreach Before, During and After a Wildfire, and Explaining Next Steps for Other Phase 2 Issues* (March 12, 2020), p. 43 (OP 24).

¹² D.19-05-036, p. 40-41 ("Each report shall clearly describe the concern, contain a specific proposal for action, including if applicable a recommendation to reduce or end the specific mitigation identified, and include any expert or other authoritative information available on the efficacy of the mitigation.").

¹³ SDG&E Advice Letter 3472-E, p. 2.

¹⁴ D.19-05-041, p. 6 (OP 1).

¹⁵ D.19-05-041, p. 58 (OP 2).

¹⁶ D.19-05-037, p. 58 (OP 1).

¹⁷ D.19-05-038, p. 51 (OP 1).

Subject to the reporting, data gathering, and other requirements set forth below and in the guidance decision on 2019 Wildfire Mitigation Plans issued concurrently with this decision, Liberty Utilities' Wildfire Mitigation Plan is approved.¹⁸

Subject to the reporting, data gathering, and other requirements set forth below and in the guidance decision on 2019 Wildfire Mitigation Plans issued concurrently with this decision, Bear Valley Electric Service's Wildfire Mitigation Plan is approved.¹⁹

Subject to the reporting, data gathering, and other requirements set forth below and in the guidance decision on 2019 Wildfire Mitigation Plans issued concurrently with this decision, PacifiCorp's Wildfire Mitigation Plan is approved.²⁰

The SDG&E WMP Decision does not contain an ordering paragraph expressly either approving or conditionally approving the 2019 WMP and thus the Commission never formally approved SDG&E's 2019 WMP.²¹

Unfortunately, like its Advice Letter, SDG&E's 2020 WMP fails to reflect the lessons learned that the Commission called for last year or even to acknowledge the vast majority of the deficiencies the Commission identified. SDG&E's entire explanation for its 2019 WMP deficiencies consists of the following paragraph:

In 2019, SDG&E complied with its filed 2019 Wildfire Mitigation Plan. Only one activity, Equipment Training, did not meet the 2019 SDG&E program goal. This program involves joint inspections of SDG&E facilities with CAL FIRE to increase the understanding of wildfire risks and site-specific hazards. SDG&E offered to train CAL FIRE employees on electrical equipment at the beginning of 2019, but CAL FIRE did not have the resources available to complete the training. CAL FIRE confirmed there was a County staffing issue, and that the County will provide additional staffing in 2020. SDG&E plans to resume joint inspections with CAL FIRE in 2020.²²

¹⁸ D.19-05-040, p. 82 (OP 1).

¹⁹ D.19-05-040, p. 84 (OP 14).

²⁰ D.19-05-040, p. 87 (OP 28).

²¹ D.19-05-039, p. 29.

²² San Diego Gas & Electric Company Wildfire Mitigation Plan (March 2, 2020) (SDG&E 2020 WMP), p. 44.

This cursory description fails to address the numerous deficiencies, discussed below, which the Commission identified with respect to SDG&E's 2019 WMP; and endures remains a far cry from providing a process for identifying additional deficiencies.²³

III. SDG&E'S METRICS ARE NOT FOCUSED ON REDUCING WILDFIRE RISKS; AND ADDITIONAL FACTS NEED TO BE DEVELOPED TO ESTABLISH THE EFFECTIVENESS OF ITS PROPOSED WILDFIRE MITIGATION ACTIVITIES.

A major deficiency identified by the Commission last year, that SDG&E has failed adequately to address in its 2020 WMP proposal, involves the metrics SDG&E uses to determine effectiveness. Section 8386 requires a description of the metrics used to evaluate the WMP's performance, the assumptions underlying use of the metrics, and a discussion of how previously identified metrics to the 2019 WMP has informed the 2020 WMP.²⁴ In the Commission's decision on the 2019 WMPs, the Commission determined that all the utilities identified metrics based on the quantity of work performed rather than the quality of the results of that work and specifically ordered SDG&E to include metrics that will actually minimize wildfire risk:

A key concern in all the utilities' WMPs, including SDG&E's, is that the 'metrics' are based on how much work the utility will perform (*e.g.*, how many trees it will cut, how many miles of conductor it will install), rather than on the results of this work (*e.g.*, reduction in wildfires or other events that cause wildfires).²⁵

SDG&E's metrics portion of its WMP should be focused on outcomes – that is, on measuring the amount by which the mitigation implemented reduces the risk of its electrical lines and equipment causing a catastrophic wildfire. The aim of the WMP portion of SB 901 is clear: “Each electrical corporation shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment.” Pub. Util. Code § 8386(a). Every aspect of the Plan must be analyzed with this goal in mind.²⁶

²³ Pub. Util. Code, § 8386, subd. (c)(21)(B).

²⁴ Pub. Util. Code, §8386, subd. (c)(4), (5), (21)(A) (“(4) A description of the metrics the electrical corporation plans to use to evaluate the plan’s performance and the assumptions that underlie the use of those metrics...(5) A discussion of how the application of previously identified metrics to previous plan performances has informed the plan.”).

²⁵ D.19-05-039, p. 18.

²⁶ D.19-05-039, p. 21, 22.

Unfortunately, although the 2020 WMP does include enough data to ascertain the trend for numerous important metrics, SDG&E’s 2020 WMP fails to address outcomes as the Commission instructed and as Section 83836 requires.

A. SDG&E’s Metrics Continue to Fail to Address Outcomes.

SDG&E’s 2020 WMP lacks any discussion of the numerous near-miss incident categories, data that show no decline in near misses over the 2015-2019 period, as shown in Table 1. Concomitantly, SDG&E omits any data or analysis of whether increasing inspection frequency – or the percentage of work that is audited – would reduce these near-miss incidents. However, in a number of instances the metric quantified shows either no progress or a rising number of near misses between 2015 and 2019, despite major expenditures over the five-year period analyzed.

Table 1. 2015-2019 Incident Trend, Selected Metrics, 2020 WMP²⁷

Near miss category, distribution system	Number of incidents per year				
	2015	2016	2017	2018	2019
Vegetation contact	32	52	39	27	50
Conductor failure – wires down	31	52	30	39	44
Conductor failure – all	11	15	8	11	16
Fuse failure - all	552	685	620	539	611
Lighting arrestor failure	20	23	27	17	26
Splice/clamp/connector	35	40	24	35	31

SDG&E includes no discussion in its 2020 WMP on how – or if – this data is being used to adjust program dollars to reduce fire risk. The data reveals that SDG&E may have already maximized the degree of wildfire mitigation it is likely to obtain from its wildfire mitigation investments to date. No matter how much money SDG&E invests in hardening, monitoring, and maintaining the above-ground transmission and distribution system in SDG&E’s high fire threat areas (“HTFD”s), a significant degree of fire threat will remain, as SDG&E admits.

²⁷ SDG&E 2020 WMP, March 2, 2020, Appendix A, p. 18-19 (Table 11a).

SDG&E claims that catastrophic wildfire threat is increasingly driven by climate change, but that assertion is not supported by the high fire threat weather data presented in the 2020 WMP.²⁸ As shown in Table 2, the number of Red Flag Warning days declined substantially in 2018-2019 compared to 2016-2017. The number of Fire Potential Index (FPI) days was about the same in 2019 (137) as they were in 2016 (138). There is no trend toward an increasing number of days per year with high fire threat.

Table 2. Red Flag Warning and Fire Potential Index Days, 2015-2019²⁹

	2015	2016	2017	2018	2019
RFW	4	20	21	12	12
FPI	108	138	169	182	137

More importantly, SDG&E’s discussion of climate change does not address the most relevant outcome. The question that SDG&E fails to ask, much less address, is “what are the effects of its operations on climate change?” That is the relevant question the Commission needs answered, which SDG&E fails to do.

B. Verification Cannot Rely WMP Templates Because the WMP Templates Are Restricted to Self-Reporting by the Utilities.

The WMP Guidelines require the utilities’ representatives to swear to the truth of the representations in the WMPs as the WMP Guidelines require,³⁰ but do not enable the Safety Division itself (much less the Commission) to ascertain whether the utilities’ representations are based in fact or otherwise credible. The WMP templates propose that the Safety Division focus on information provided only by the utilities.³¹

²⁸ SDG&E 2020 WMP, p. 4 (“With the increasing impacts from a variety of factors such as climate change, and development and population growth in fire-prone areas, catastrophic wildfires continue to pose a threat throughout California and the San Diego region.”).

²⁹ SDG&E 2020 WMP, Appendix A, p. A-7 (Table 3).

³⁰ R.18-10-007, Administrative Law Judge’s Ruling on Wildfire Mitigation Plan Templates and Related Material and Allowing Comment (December 16, 2019) (Ruling), Attachment 1, p. 15.

³¹ See e.g. Ruling, Attachment 4, p. 16 et seq. (requiring the utilities to self-report on metrics).

As a result, the Wildfire Safety Division cannot rely on the WMP Templates to meet its statutory obligations. The Wildfire Safety Division’s duty to verify the WMPs comply with all applicable rules and regulations³² constitutes a statutory obligation related to but distinct from the review requirement,³³ the independent evaluation requirement,³⁴ the maximum feasible risk reduction requirement,³⁵ the hearing requirement,³⁶ and the minimizing the risk of catastrophic wildfire requirement.³⁷ Moreover, the utilities’ performance must be evaluated according to statutory mandates “to achieve maximum feasible risk reduction”³⁸ and to “minimize the risk of catastrophic wildfire.”³⁹

The WMP templates do not provided for verification because both because they are focused on the utilities’ self-reports and because the metrics are inadequate to determine effectiveness. For example, the WMP metrics address “critical infrastructure impacted,” but only from the standpoint of how many hours that critical infrastructure was impacted by a PSPS event. No metric has been proposed that evaluates how many critical infrastructure locations affected by PSPS(s) have clean backup power systems (systems such as solar with battery storage that do not present new sources of ignition), or how many individual customers affected by PSPS(s) have clean backup power systems, or what a utility is doing to facilitate the deployment of clean backup power systems at critical facilities and affected individual customer locations, to assure critical facilities and affected customers can ride-out PSPS events with minimal or no disruption.

³² Pub. Util. Code, § 8386, subd. (d).

³³ Pub. Util. Code, § 8386, subd. (b).

³⁴ Pub. Util. Code, § 8386.3, subd. (c)(2).

³⁵ Pub. Util. Code, § 326, subd. (a)(2).

³⁶ SB 901; Pub. Util. Code, § 768.

³⁷ Pub. Util. Code, § 8386, subd. (a).

³⁸ Pub. Util. Code, § 326, subd. (a)(2).

³⁹ Pub. Util. Code, § 8386, subd. (a).

The Commission should allow evidentiary hearings to determine what safety measures actually work and which are the most cost effective. Evidentiary hearings are necessary because whether SDG&E failed to implement mitigation measures that will actually “minimize the risk of catastrophic wildfire posed by” SDG&E’s electrical lines and equipment⁴⁰ is very much in dispute. The Wildfire Safety Division should examine the facts and whether expert support exists for the utilities’ proposals, and should allow alternative measures to be submitted by other parties for the Commission’s consideration in a manner that requires the best alternatives actually to be implemented.⁴¹ An evidentiary hearing will provide the Commission with a forum to consider the alternatives presented by all parties, and will enable the Commission to avoid the admittedly ineffective just-trust-the-utilities approach.⁴² Moreover, SDG&E’s mitigation strategies have never been vetted, and fundamental due process principles require a hearing because the effectiveness of SDG&E’s proposed mitigation necessarily turns on questions of fact⁴³ including:

- which vegetation management practices are the most effective and at what relative cost;
- whether hardening practices will actually mitigate wildfires, including assessing the cost-effectiveness of retrofitting existing wooden poles, undergrounding conductors, and microgrids;
- the availability and cost effectiveness of solar plus battery power systems that do not add to fire risk in HFTDs as the least cost, most reliable, and safest alternative to PSPS events and during PSPS events.

⁴⁰ Pub. Util. Code, § 8386, subd. (a).

⁴¹ *City and County of San Francisco v. Public Utilities Com.* (1971) 6 Cal.3d 119, 130 (holding that “failure to consider lawful alternatives” is error, and “the decision of the commission must be annulled”).

⁴² See e.g. *Greene v. Elroy* (1959) 360 U.S. 474, 497, quoting 5 Wigmore on Evidence (3d ed. 1940) § 1367 (“The belief that no safeguard for testing the value of human statements is comparable to that furnished by cross-examination, and the conviction that no statement...should be used as testimony until it has been probed and sublimated...has found increasing strength in lengthening experience...”).

⁴³ See *Manufactured Home Communities, Inc. v. City of San Louis Obispo* (2008) 167 Cal.App.4th 705, 711. (“...in ‘almost every setting where important decisions turn on questions of fact, due process requires an opportunity to confront and cross-examine adverse witnesses’”).

Parties should be permitted to question the utilities' claims that the utilities have appropriately assessed wildfire risk,⁴⁴ and to cross-examine utility witnesses as to whether and how they have prioritized programs and expenditures in a manner that will most effectively mitigate the risk of wildfires and best comply with the spirit and intent of Section 8386.

IV. SDG&E'S APPROACH TO RISK ASSESSMENT AND RISK MITIGATION DOES NOT MEET THE COMMISSION'S MINIMUM RISK ASSESSMENT REQUIREMENTS AND FAILS TO SATISFY SECTION 8386(C)(11).

A second major category that the Commission identified as deficient with most of the utilities' 2019 WMPs relates to risk assessment. In requiring the utilities to "minimize the risk of catastrophic wildfire posed by" the utilities' electrical lines and equipment;⁴⁵ Section 8386 not only requires that WMPs set forth objectives, but also includes four specific requirements regarding risk assessment. The particularized risk assessment requirements mandate (1) a description of the strategies and programs that will minimize wildfire risk, including climate change risks; (2) a list prioritizing all wildfire risks and the drivers for those risks which includes all information required by the S-MAP and RAMP proceedings; (3) a description of how the plan accounts for the wildfire risk identified in a utilities' RAMP filing; and (4) a methodology for identifying and presenting enterprise safety risk and wildfire related risk that is consistent with other utilities.⁴⁶

⁴⁴ D.19-05-036, p. 29, fn. 42 (Commission acknowledging that "risk assessment is often a black box with insufficient description of the supporting information and rational for proposed programs.").

⁴⁵ Pub. Util. Code, § 8386, subd. (a).

⁴⁶ Pub. Util. Code, §8386, subd. (c)(3), (11), (12), (17) ("(3) A description of the preventive strategies and programs to be adopted by the electrical corporation to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks. (11) A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the electrical corporation's service territory, including all relevant wildfire risk and risk mitigation information that is part of the Safety Model Assessment Proceeding and the Risk Assessment Mitigation Phase filings. The list shall include, but not be limited to, both of the following: (A) Risks and

A. In 2019 The Commission Acknowledged Key Deficiencies in the Utilities' Initial Risk Assessment That Should Be Fixed in 2020.

Describing the utilities' risk assessment as a "black box," the Commission determined that most of the utilities' 2019 WMPs were deficient in their approach to risk assessment overall:

Most of the IOU WMPs justify inspection and hardening program proposals as being informed by an internal risk assessment. However, that risk assessment is often a black box with insufficient description of the supporting information and rationale for proposed programs. Future filings should provide documentation of the risk analysis used to justify the proposals. A "trust us, we know what we are doing" approach to risk assessment is not appropriate given recent wildfire activity.⁴⁷

The Commission also identified more specific risk assessment deficiencies, including that the 2019 WMPs did not meet the minimum requirements set forth in the Commission's S-MAP and RAMP decisions:

The WMP statute refers to the Commission's safety-oriented processes carried out during GRCs.[] We interpret the inclusion of those processes to reflect a desire to ensure the safety work in GRCs is incorporated into WMPs. We agree that both processes are important to a consideration of the adequacy of utility safety efforts.

Our recent decision in the S-MAP/GRC context adopted an approach that prioritizes actions based on their "Risk-Spend Efficiency." The approach uses a tool called Multi-Attribute Value Function (MAVF) that provides a single value to measure the combined effects of each mitigation measure on a certain risk event. The process involves performing risk assessments and ranking risks using safety, reliability, and other attributes. This approach provides a means to compare the programs against each other for effectiveness, especially when multiple overlapping programs are proposed for the same assets and intended to mitigate the same risk event (i.e., increased vegetation clearing coupled with installing covered conductor and expanded de-energization practices).

risk drivers associated with design, construction, operations, and maintenance of the electrical corporation's equipment and facilities. (B) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the electrical corporation's service territory. (12) A description of how the plan accounts for the wildfire risk identified in the electrical corporation's Risk Assessment Mitigation Phase filing. (17) A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk that is consistent with the methodology used by other electrical corporations unless the commission determines otherwise.").

⁴⁷ D.19-05-036, p. 29, fn. 42.

Including such analysis in the WMPs would provide the Commission a transparent and effective way to balance overlapping programs in the WMP and assess which programs are needed and effective. As stated above, the statute requires “all relevant wildfire risk and risk mitigation information that is part of the Safety Model Assessment Proceeding and Risk Assessment Mitigation Phase filings.” This quantitative information is relevant, and the process of conducting these analyses may allow stakeholders to better understand the cost effectiveness of proposed mitigations.

Future large IOU WMP filings must provide the elements necessary to evaluate mitigation programs and strategies using a singular value to measure the combined effects of various mitigation measures, as now required in S-MAP and facilitated through MAVF.⁴⁸

Because the Commission determined last year’s WMPs failed to meet the Commission’s risk assessment standards, the review of the utilities’ risk assessment in this year’s 2020 wildfire proposals becomes paramount. Requiring that SDG&E in particular adhere to the Guidance Decision and the Commission’s risk-related decisions is further critical because as POC explained in recent comments in SDG&E’s 2019 RAMP proceeding, unlike the other utilities, SDG&E was not required to comply with D.16-08-018 in its 2016 RAMP report.⁴⁹

⁴⁸ D.19-05-036, p. 28-29 (footnotes citing to SB 901 and D.18-12-014 requirements and containing the “black box” quote omitted); *see also* D.19-05-036, p. 33 (“We agree with the parties that assessment of risk is essential to determining where to conduct wildfire mitigation, and that the WMPs filed this year do not always show that electrical corporations are targeting the area of greatest risk. We therefore believe steps are necessary to ensure that risk is given adequate consideration in next year’s WMP filings. A proper risk analysis takes into account where and when the risk of wildfire is greatest. There are two primary components that determine fire spread potential: (1) the native fuel system and topography where the ignition occurs, and (2) the climatological conditions (*i.e.*, temperature, relative humidity, wind speed/direction) present when the ignition occurs.”).

⁴⁹ D.16-08-018, *Interim Decision Adopting Multi-Attribute Approach (Or Utility Equivalent Features) and Directing Utilities to Take Steps Toward a More Uniform Risk Management Framework* (August 18, 2016), p. 196 (OP 9: “Because the Sempra utilities...have limited time to file a Risk Assessment Mitigation Phase (RAMP), SDG&E and SoCalGas shall file a RAMP based on its current risk evaluation and risk-based decisionmaking methodologies, and additional requirements as listed in the ten major components that shall be included in the RAMP filings.”); I.19-11-010/011, *The Protect Our Communities Foundation Reply in Support of its Proposal Regarding How This Proceeding Should Move Forward in Light of the Directives in D.20-01-002*; and *Comments on the Joint 2019 Risk Assessment and Mitigation Phase Report of Southern California Gas Company (U 904-G) and San Diego Gas & Electric Company (U 902-M)* (April 6, 2020), p. 5.

D.16-08-018 among other things directed the utilities “to remove shareholders’ financial interests from consideration in their risk models and decision frameworks used to support rate case expenditure proposals, especially at the operational level, unless the utility can make a good case for an exception in its Risk Assessment Mitigation Phase filing.”⁵⁰ Additionally, acknowledging the importance of prioritizing mitigation measures based on cost-effectiveness, the Commission mandated in D.16-08-018 that RAMP filings “shall explicitly include calculation of risk reduction and a ranking of mitigations based on risk reduction per dollar spent.”⁵¹ SDG&E has yet to comply with these key and critical Commission mandates.⁵² Nor has SDG&E’s approach to risk assessment and risk mitigation ever been reviewed for compliance with D.18-12-014.⁵³ D.18-12-014 approved a settlement agreement “that achieves steps toward a more uniform and quantitative risk-based decision making framework in the Safety Model Assessment Proceeding (S-MAP).”⁵⁴ The provisions of the settlement agreement approved in D.18-12-014 “constitute the minimum required elements for risk and mitigation analysis in the” RAMP and GRC.⁵⁵ As set forth below, SDG&E’s 2020 WMP comes nowhere close to meeting the Commission’s risk assessment and risk mitigation requirements.

⁵⁰ D.16-08-018, p. 195-196 (OP 6).

⁵¹ D.16-08-018, p. 196 (OP 8).

⁵² D.16-08-018, p. 196 (OP 9); D.19-09-051, p. 762 (“The Commission’s guidance regarding RAMP was limited at the time Applicants submitted their GRC applications... We expect RAMP integration in future GRC filings to provide better information on what spending is proposed to mitigate risks and how past spending has reduced risk per dollar spent.”); D.19-09-051, p. 22 (“Since Applicants designate both the risk and mitigation activities as RAMP-related, and re-evaluated using a risk-based approach and framework, the general result is witness testimony that states that numerous activities are in fact mitigation of key risks, often leading to a higher forecast.”); D.19-09-051, p. 762 (“The Commission’s guidance regarding RAMP was limited at the time Applicants submitted their GRC applications... We expect RAMP integration in future GRC filings to provide better information on what spending is proposed to mitigate risks and how past spending has reduced risk per dollar spent.”).

⁵³ D.18-12-014, *Phase Two Decision Adopting Safety Model Assessment Proceedings (S-MAP) Settlement Agreement with Modifications* (December 13, 2018).

⁵⁴ D.18-12-014, p. 2.

⁵⁵ D.18-12-014, p. 2.

B. The 2020 WMP Fails to Remove Shareholder Interests from the Decision-Making Process.

SDG&E's WMP makes clear that SDG&E is focused on capital projects and its assets.⁵⁶ Inspection activities – which are extremely effective - were not given RSE values and thus were not counted toward risk reduction.⁵⁷ SDG&E's justification for refusing to calculate RSEs for inspection activities included that the costs “are embedded in internal labor”⁵⁸ and that programs are “mandated pursuant to GO 165.”⁵⁹ SDG&E's focus on capital programs and its failure to value labor programs reveals SDG&E has failed to “to remove shareholders' financial interests from consideration in their risk models and decision frameworks used to support rate case expenditure proposals, especially at the operational level.”⁶⁰ Moreover, SDG&E has failed to show any case, much less demonstrated a good case, for an exception in its Risk Assessment Mitigation Phase filing” as required by D.16-08-018 Unlike the other large electric utilities, SDG&E was not required to conform to D.16-08-018 in its initial 2016 RAMP Report.⁶¹

C. SDG&E's 2020 WMP Failed to Calculate RSEs as Required by D.18-12-014.

Like last year, SDG&E's 2020 WMP fails to provide the necessary analysis on the effectiveness of mitigation per dollar spent.⁶² In SDG&E's 2020 WMP, SDG&E “utilized the same approach regarding RSEs as it did in its 2019 RAMP.”⁶³

⁵⁶ SDG&E 2020 WMP, p. 145.

⁵⁷ See e.g. SDG&E 2019 RAMP Report p. SDG&E 1-88, 1-89.

⁵⁸ SDG&E 2019 RAMP Report p. SDG&E 1-88, 1-89 (“Costs were not identified for this activity because they are embedded in internal labor.”).

⁵⁹ SDG&E 2019 RAMP Report p. SDG&E 1-89 (“Because this program is mandated pursuant to GO 165, an RSE calculation is not being performed.”).

⁶⁰ D.16-08-018, p. 195-196 (OP 6).

⁶¹ D.16-08-018, p. 153, 196 (OP 9) (“Because the Sempra utilities...have limited time to file a Risk Assessment Mitigation Phase (RAMP), SDG&E and SoCalGas shall file a RAMP based on its current risk evaluation and risk-based decision-making methodologies, and additional requirements as listed in the ten major components that shall be included in the RAMP filings.”).

⁶² D.19-05-036, p. 32 (“POC recommends that future WMPs provide analyses on the effectiveness of mitigation per dollar spent.”).

⁶³ SDG&E 2020 WMP, p. 149.

As POC commented in I.19-11-011, SDG&E did not even attempt to calculate RSEs for half of its risk reduction activities. SDG&E claimed to have calculated RSEs only for “all in-scope non-mandated activities, certain mandated Controls, and all Mitigations whether they were mandated or not.”⁶⁴ SDG&E’s failure to prioritize risk reduction measures based on cost-effectiveness as required by D.14-12-025, D.16-08-018, and to calculate RSEs as required by D.18-12-014 all but ensures the safety mandate of Section 8386 will not be achieved.

Moreover, failing to calculate RSEs for mandated actions in the 2019 RAMP Report violates the terms of D.18-12-014 to which SDG&E agreed,⁶⁵ and at best provides a distorted view of the companies’ actual risk reduction activities which fails to provide the comprehensive analysis repeatedly required by the Commission, starting as early as D.14-12-025.⁶⁶ Failing to include RSEs for mandated actions conflicts with this Commission’s prior safety mandates and documents SDG&E’s unjustifiable persistence in failing to comply with the Commission’s mandated safety information and analyses. D.18-12-014 requires that the utilities measure risk reduction provided by all risk mitigations;⁶⁷ and that the utilities calculate risk spend efficiency (RSE) “by dividing the mitigation risk reduction benefit by the mitigation cost estimate.”⁶⁸

⁶⁴ SDG&E RAMP D-9; SoCalGas RAMP D-9, D-10.

⁶⁵ I.19-11-010/011, Order Instituting Investigation into the Risk Assessment and Mitigation Phase Submission of San Diego Gas & Electric Company (November 7, 2019) (SDG&E OII), p. 3-4. (the Settlement Agreement approved in D.18-12-014 “provided a more robust and stronger version of the ten recommended RAMP components than was first introduced in D.16-08-018,” including the requirement “that risk spend efficiency [RSE] calculations for risk mitigations are independent of RAMP risk selection.”).

⁶⁶ D.14-12-025, p. 39-40 (a utility’s RAMP submission is required to provide a “comprehensive view of the utilities potential safety risks, and its plans for addressing those risks,” and must “include all of [a utility’s] risk assessments and mitigation plans”)

⁶⁷ D.18-12-014, Attachment A, p. A-12.

⁶⁸ D.18-12-014, Attachment A, p. A-13.

SDG&E claims to be able to calculate PSPS risk reduction, but admits it failed to do so.⁶⁹ In the 2019 RAMP Report, SDG&E arbitrarily eliminates an analysis of matters SDG&E deems to be “secondary impacts,” such as fatalities resulting from power shut off events which are entirely within its control.⁷⁰ SDG&E reasons that so long as they remain ignorant of the available data regarding the secondary effects of their direct and volitional activities, they need not include secondary effects in their risk analysis.⁷¹ Eliminating all the so-called secondary effects which are in the companies’ direct control defies logic – and the necessity of identifying all the safety problems and risks that the companies face.

SDG&E has acknowledged a highly probability that it will start or contribute to a major fire, causing on the order of \$3.7 billion in damages, sometime in the next 20 years.⁷² SDG&E admits in other venues that future wildfires will occur even if the Commission approves its mitigation proposals. The utility’s own sobering assessment, provided in the Cost of Capital proceeding, already incorporated all of SDG&E’s ongoing wildfire mitigation programs.⁷³

⁶⁹ SDG&E 2020 WMP, p. 48.

⁷⁰ SDG&E RAMP A-11-12; SoCalGas RAMP A-12.

⁷¹ SDG&E RAMP-C-34.

⁷² Voice of San Diego, *SDG&E Says There’s a 100% Chance It’ll Start or Contribute to a Major Wildfire*, June 10, 2019: <https://www.voiceofsandiego.org/topics/news/sdge-says-theres-a-100-chance-itll-start-or-contribute-to-a-major-wildfire/>; A.19-04-017, SDG&E 2020 Cost of Capital: Exhibit SDG&E-05, Prepared Direct Testimony of Concentric Energy Advisors Wildfire Risk Premium Public Version, p. 50 (“The Estimated Loss Approach is based on the best available estimate of the Company’s expected risk of wildfire financial loss, and the earnings required to offset this loss. This analysis, which indicated that a risk premium of 187 basis points was appropriate, directly measures the potential likelihood of an annual unrecoverable wildfire loss above the Company’s insurance coverage (approximately a 5 percent annual probability of an average \$3.68 billion event), for which the risk premium would compensate investors.”).

⁷³ See A.19-04-017, Exhibit SDG&E-05, p. 4, fn. 1 (“In this Testimony we refer to ‘unmitigated’ wildfire risk in financial terms, reflecting the residual exposure to shareholders under the current California regulatory and legislative framework. We recognize that SDG&E has taken steps to limit the likelihood of and damage caused by wildfires, and those mitigation measures are factored into our analysis.”).

SDG&E has already apparently resigned itself to another SDG&E-caused catastrophic wildfire as the most likely end result, after pouring billions of dollars into the incredibly expensive fire risk mitigation measures (like steel poles, undergrounding, drones) it proposed in both its 2019 and now its 2020 WMP. The Commission must not succumb to such a presumed inevitability and should instead take a fresh look at innovative and lower-cost alternatives. POC proposes several such alternatives in these comments.

Coupled with SDG&E's admissions in the recent Cost of Capital proceeding that SDG&E's fire risk would remain a constant 5% per year even when taking into account all the fire mitigation activities, SDG&E's failure to rank its proposed mitigation by their cost effectiveness should result in the conclusion that SDG&E's risk reduction per dollar spent totals zero. SDG&E's failures to assess these key components that document and demonstrate safety should result in the Commission's rejection of its inadequate 2020 WMP proposal and the order to update and augment its deficient plan with data, analyses and metrics that comply with the Commission's current safety mandates.

D. SDG&E's 2020 WMP Fails Transparency Standards.

An overarching failure with SDG&E's 2020 WMP is that its Wildfire Risk Reduction Model (WRRM) is not transparent. The WRRM allows for analytics and determinations by "SDG&Es engineers and emergency operations,"⁷⁴ but D.18-12-014 mandates that calculations should be repeatable by third parties.⁷⁵ SDG&E claims to have a "process in place to validate all wildfire modeling,"⁷⁶ but SDG&E fails to describe that process and thus similarly fails to comply with the Commission's transparency mandates.

⁷⁴ SDG&E 2020 WMP, p. 47, 48

⁷⁵ D.18-12-014, Attachment A, p. A-17.

⁷⁶ SDG&E 2020 WMP, p. 50.

SDG&E also fails to meet the transparency requirements of D.18-12-014 with respect to its discussion of alternatives. D.14-12-025 requires the utilities to present alternatives to mitigation proposals, and D.18-12-014 requires that the alternative mitigation be valued using the MAVF and calculation of a RSE for each mitigation alternative.⁷⁷ SDG&E provides no legitimate rationale for choosing its adopted programs over others, such as declining to increase inspections rather than create its new, untested and expensive drone program.⁷⁸ POC provides only some examples of the many instances throughout SDG&E's 2020 WMP that SDG&E's risk analysis violates the requirements in D.18-12-014 that the utilities "clearly and transparently explain its rationale for selecting mitigations for each risk and for its selection of its overall portfolio of mitigations;"⁷⁹ and that "[i]nputs and computations...should be clearly stated and defined" and "the sources of inputs should be clearly specified."⁸⁰

V. SDG&E'S 2020 WMP MEETS NEITHER THE COMMISSION'S NOR THE STATUTE'S INSPECTION MANDATES.

In addition to metrics and risk assessment deficiencies, the Commission also identified deficiencies with respect to the utilities' inspection practices. Section 8386 requires that WMPs include both (1) "Plans for inspections of the electrical corporation's electrical infrastructure,"⁸¹ as well as (2) "A description of the processes and procedures the electrical corporation will use to do all of the following: ...Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, carried out under the plan and other applicable statutes and commission rules."⁸²

⁷⁷ D.18-12-014, p. 34.

⁷⁸ SDG&E 2019 RAMP Report p. SDG&E 1-46.

⁷⁹ D.18-12-014, Attachment A, p. A-14.

⁸⁰ D.18-12-014, Attachment A, p. A-17.

⁸¹ Pub. Util. Code, § 8386, subd. (c)(9).

⁸² Pub. Util. Code, § 8386, subd. (c)(21)(C).

Last year, the Commission faulted the utilities in general for failing to comply with the inspection mandates in Section 8386 as well as the Commission’s General Order 165, and ordered the utilities to comply in their 2020 WMPs:

In order to comply with Section 8386(c)(19)(C), future WMPs must include a discussion of how the utility evaluates the effectiveness of routine inspection programs developed in accordance with existing regulations such as the Commission's infrastructure inspection requirements in GO 165.[] At a minimum, the discussion should detail what the inspection is looking for, the number of each type of inspection conducted, the cost of each type of inspection, and a listing of the top five violations or hazards identified by each inspection program, including its location and GO 95, Rule 18 priority level rating.⁸³

The Commission also identified inadequacies in SDG&E’s inspection programs in particular, concluding that SDG&E has been misinterpreting General Order 165, which requires that “[l]ines shall be inspected frequently and thoroughly for the purpose of ensuring they are in good condition so as to conform with these rules.”⁸⁴ The Commission required SDG&E, at a minimum, to “include the condition of the inspected equipment, any problems found, and a schedule date for corrective action.”⁸⁵

SDG&E’s 2020 WMP largely complies with the directive to detail the nature of the inspections that SDG&E plans to conduct. However, SDG&E’s proposed equipment inspection initiatives budget almost exclusively dedicates spending to drone assessments. SDG&E presents no compelling justification in its 2020 WMP for converting its inspection program, at least from a budgetary standpoint, to a drone inspection program.

⁸³ D19-05-039, p. 27-28.

⁸⁴ D.19-05-039, p. 3-4.

⁸⁵ D.19-05-039, p. 3-4 (determining SDG&E misinterpreted General Order 165 and requiring SDG&E at a minimum to “include the condition of the inspected equipment, any problems found, and a schedule date for corrective action.”).

The equipment inspection activities included in SDG&E’s 2020 WMP are listed in Table 3, along with the associated budget for each inspection activity. The budget for conventional inspection initiatives (physical inspections performed by workers) totals only \$6.1 million. By comparison, the budget for drone assessments amounts to \$151.9 million.

Table 3. SDG&E equipment inspection initiatives included in the 2020 WMP

Type of inspection	Description⁸⁶	2020-2022 Budget⁸⁷ (\$MM)
Corrective maintenance	GO 165 requirement: Patrols in Tier 2 and 3 HTFDs every year, detailed inspections every 3-5 years.	4.1
Infrared – transmission	Once per year. Check for loose connections (thermal hotspots).	N/A (FERC)
Infrared – distribution	SDG&E to pilot program in 2020. Will ramp up to 20% of structures by 2021. SDG&E will prioritize inspections in Tier 3 of the HFTD.	0.8
Intrusive pole	Wood poles over 15 years of age are intrusively inspected within 10 years, then on 20-year inspection cycles.	No budget specified
LIDAR inspections of T&D	Check clearances.	No budget specified
Tier 3 HTFD	QA/QC inspections within the HFTD Tier 3 prior to fire season. Proactive inspections are scheduled on a three-year cycle.	1.2
Drone assessments: Capital O&M (flights) O&M (engineering)	Capture images of overhead structures from above. Most of drone budget is for analysis of images.	10.2 65.9 75.8
Distribution pole	GO 165-mandated patrol inspections. 1.5% of work is audited.	No budget specified
Transmission pole	Visual inspection once per year in HTFD via helicopter. Detailed inspection every three years. Audit of 1% of repairs.	N/A (FERC)
Auditing of inspections	SDG&E typically selects about 1.5% of work performed to see if improvements achieved.	No budget specified
Total:		158.0

⁸⁶ SDG&E 2020 WMP, p. 94-110.

⁸⁷ SDG&E 2020 WMP, Appendix A, p. 54 (Table 24: Asset Management and Inspections Initiatives).

POC recommends that, if drones are used at all, they be used as a relatively minor “as needed” adjunct to the field patrols, and not so extensively relied on in a massive new program that completely dominates the inspection budget. A drone budget on the order of \$1 million, as a pilot to determine the value added by the use of drone inspections, would be reasonable. But overturning the tried-and-true focus on physical inspections and substituting an untested drone program would likely result in a waste of ratepayer dollars without providing any additional or even adequate safety assurances.

A comparison of a related utility provides insight into cost-effective inspection program that produces better safety results. Bear Valley Electric, with more than 24,000 customers and close to 600 miles of transmission and distribution lines,⁸⁸ involves a service territory and customer base on the same scale as SDG&E’s Tier 3 HFTD. SDG&E’s Tier 3 HTFD has 31,181 customers and 1,658 miles of distribution lines. BVE experienced no conductor-to-vegetation contact incidents in 2019 and uses no drone program or drone budget.⁸⁹ BVE's allocation of resources demonstrates that excellent fire mitigation performance can be achieved without the use of drones.

VI. SDG&E FAILED TO COMPLY WITH COMMISSION DIRECTIVES AND SECTION 8386 BECAUSE ITS VEGETATION MANAGEMENT PRACTICES ARE UNREASONABLE AND ARE NOT SUPPORTED BY SCIENTIFIC EVIDENCE.

Section 8386 requires that WMPs include “Plans for vegetation management.”⁹⁰ Last year, the Commission concluded that SDG&E’s plans for vegetation management were unjustified.

⁸⁸ Bear Valley Electric Service 2020 Wildfire Mitigation Plan (February 7, 2020) (BVE 2020 WMP), p. 29.

⁸⁹ BVE 2020 WMP, p. 12.

⁹⁰ Pub. Util. Code, § 8386, subd. (c)(8).

The Commission determined that SDG&E’s “25-foot post-trim clearance is more than double the recommended post-trim clearance in GO 95, Appendix E (12 feet in the HFTD for lines operating at 72kV or less – typical distribution and sub-transmission line voltages).”⁹¹ The Commission required SDG&E to provide detailed justification for its excessive vegetation clearance practices in its 2020 WMP:

In SDG&E’s next WMP, it shall propose, in detail, guidelines for where a 25-foot-post-trim clearance for vegetation management is both feasible and necessary. If SDG&E plans to create a 25-foot clearance during this WMP cycle, it may only do so if such a practice is supported by scientific evidence or other data showing that such clearance will reduce risk under wildfire conditions.⁹²

SDG&E’s 2020 WMP fails to meet the standards the Commission set in 2019.

A. As the Commission Already Found, SDG&E’s 25-Foot Clearance Is Unreasonable Absent Explicit, Science-Based Justification.

Instead of complying with the Commission’s directives, SDG&E went ahead and targeted 81,000 healthy trees for excessive clearance.⁹³ SDG&E fails to provide any justification for cutting trees back to 25-feet, other than that the trees targeted are fast-growing and limbs can break in high winds (eucalyptus).⁹⁴ As the Commission criticized previously, SDGE’s proposed set-back distance is more than double the Commission standard of 12 feet in GO 95 .⁹⁵ Bear Valley has safely and effectively addressed vegetation contact issues only a 6-foot clearance coupled with vigorous inspections.⁹⁶

⁹¹ D.19-05-039, p. 10.

⁹² D.19-05-039, p. 10.

⁹³ SDG&E 2020 WMP, p. 39.

⁹⁴ SDG&E 2020 WMP, p. 114.

⁹⁵ SDG&E 2020 WMP, p. 122. “SDG&E’s tree-trim scope will be increased to achieve a 25-foot clearance post-prune, where feasible, between trees and electric facilities within the HFTD. This is a significant increase over the average 12 feet post-prune clearance that SDG&E currently achieves. There may be some barriers to fully achieving this goal. For instance, environmental agencies, land agencies, and customers may oppose the tree pruning to this new clearance.”

⁹⁶ BVE 2020 WMP, p. 57 (6-foot clearance).

B. SDG&E's Vegetation Management Proposals Contribute to Climate Change Impacts and Violate CEQA.

SDG&E should emphasize detailed and frequent inspections, instead of proposing the elimination of critical natural carbon sinks. As mentioned in the risk assessment section above, any utility wildfire mitigation program should “minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.”⁹⁷ Removing healthy trees *increases* climate change risks and thus conflicts with the Commission’s statutory mandates unless found to be the only option that works to prevent wildfires.⁹⁸ SDG&E has not and cannot make such a factual showing here.

SDG&E has not and cannot show that its tree removal program is exempt from CEQA.⁹⁹ CEQA only exempts “minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes.”¹⁰⁰ This limited exemption does not apply to the extensive and excessive vegetation management practices described in SDG&E’s 2020 WMP.¹⁰¹

⁹⁷ Pub. Util. Code, § 8386, subd. (c)(3).

⁹⁸ Jean-Francois Bastin et al., *The global tree restoration potential*, Science (July 5, 2019); *see also* The Guardian, *Tree planting ‘has mind-blowing potential’ to tackle climate crisis*, available at <https://www.theguardian.com/environment/2019/jul/04/planting-billions-trees-best-tackle-climate-crisis-scientists-canopy-emissions>; The Guardian, *Greta Thunberg: ‘We are ignoring natural climate solutions’* Film by Swedish activist and Guardian journalist George Monbiot says nature must be used to repair broken climate, available at <https://www.theguardian.com/environment/2019/sep/19/greta-thunberg-we-are-ignoring-natural-climate-solutions>.

⁹⁹ SDG&E 2020 WMP, p. 114.

¹⁰⁰ 14 Cal. Code Regs., § 15304, subd. (i) (examples of minor alterations in the condition of land or vegetation “include but are not limited to... (i) Fuel management activities within 30 feet of structures to reduce the volume of flammable vegetation, provided that the activities will not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. This exemption shall apply to fuel management activities within 100 feet of a structure if the public agency having fire protection responsibility for the area has determined that 100 feet of fuel clearance is required due to extra hazardous fire conditions.”)

¹⁰¹ Moreover, the CEQA exemption does not apply “where the project may impact on an environmental resource of hazardous or critical concern,” “when the cumulative impact of successive projects of the same type in the same place, over time is significant,” “where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances,” when a project

Accordingly, for the Commission to approve SDG&E’s tree removal scheme, SDG&E must first demonstrate how it will mitigate the adverse climate change effects of its tree removal program.¹⁰² CEQA also requires SDG&E to consider alternatives to SDG&E’s excessive vegetation clearance practices.¹⁰³ Effective alternatives are readily available. Bear Valley minimizes fire risk with a 6-foot separation standard in combination with regular walking inspections of rights-of-way and timely preventive tree trimming.¹⁰⁴ SDG&E’s 2020 WMP fails even to assess, much less to implement, this alternative approach, which employs best available maintenance practices from a tree conservation standpoint.

C. SDG&E’s Vegetation Practices are Not Cost Effective.

SDG&E focuses on a massive cut-back of trees with its expanded enhanced inspections, patrols and trimming budget, but fails to address how it will achieve environmental compliance and community acceptance of its drastic expansion of tree cutting.¹⁰⁵ SDG&E also fails to provide any support for its contention that its overall fire risk would be reduced 5% per year by expanding the tree and vegetation set-back to 25 feet.¹⁰⁶

The vegetation inspection and management activities included in SDG&E’s 2020 WMP are listed in Table 4, along with the associated budget for each inspection activity.

“may result in damage to scenic resources, including but not limited to, trees...within a highway officially designated as a state scenic highway” or when a project “may cause a substantial adverse change in the significance of a historical resource.” 14 Cal. Code Regs., § 15300.2.

¹⁰² 14 Cal. Code Regs. § 15064.4 (Determining the Significance of Impacts from Greenhouse Gas Emissions); 14 Cal. Code Regs. § 15065 (Mandatory Findings of Significance).

¹⁰³ 14 Cal. Code Regs., § 15126.6.

¹⁰⁴ BVE 2020 WMP, p. 57.

¹⁰⁵ SDG&E 2020 WMP, p. 122. “SDG&E’s tree-trim scope will be increased to achieve a 25-foot clearance post-prune, where feasible, between trees and electric facilities within the HFTD. This is a significant increase over the average 12 feet post-prune clearance that SDG&E currently achieves. There may be some barriers to fully achieving this goal. For instance, environmental agencies, land agencies, and customers may oppose the tree pruning to this new clearance. Nevertheless, SDG&E expects to work through these issues to achieve the desired wildfire risk mitigation.”

¹⁰⁶ *See Ibid.*

SDG&E proposes a total of \$224.4 million for (1) tree trimming, (2) fuels management, (3) enhanced inspections, patrols, and trimming, and (4) pole brushing. SDG&E holds spending for tree trimming approximately constant from 2019 to 2020 in the 2020 WMP, from \$33.9 million per year to \$33.3 million per year and claims that the projected risk reduction achieved by holding this line item budget constant totals 50% per year.

Table 4. SDG&E equipment inspection initiatives included in the 2020 WMP

Type of inspection	Description¹⁰⁷	2020-2022 Budget¹⁰⁸ (\$MM)
Corrective maintenance	GO 165 requirement: Patrols in Tier 2 and 3 HTFDs every year, detailed inspections every 3-5 years.	4.1
Infrared - transmission	Once per year. Check for loose connections (thermal hotspots).	N/A (FERC)
Infrared - distribution	SDG&E to pilot program in 2020. Will ramp up to 20% of structures by 2021. SDG&E will prioritize inspections in Tier 3 of the HFTD.	0.8
Intrusive pole	Wood poles over 15 years of age are intrusively inspected within 10 years, then on 20-year inspection cycles.	No budget specified
LIDAR inspections of T&D	Check clearances.	No budget specified
Tier 3 HTFD	QA/QC inspections within the HFTD Tier 3 prior to fire season. Proactive inspections are scheduled on a three-year cycle.	1.2
Drone assessments: Capital O&M (flights) O&M (engineering)	Capture images of overhead structures from above. Most of drone budget is for analysis of images.	10.2 65.9 75.8
Distribution pole	GO 165-mandated patrol inspections. 1.5% of work is audited.	No budget specified
Transmission pole	Visual inspection once per year in HTFD via helicopter. Detailed inspection every three years. Audit of 1% of repairs.	N/A (FERC)
Auditing of inspections	SDG&E typically selects about 1.5% of work performed to see if improvements achieved.	No budget specified
Total:		158.0

¹⁰⁷ SDG&E 2020 WMP, p. 94-110.

¹⁰⁸ SDG&E 2020 WMP, Appendix A, p. 54 (Table 24: Asset Management and Inspections Initiatives).

The 2020 WMP lacks any analysis or data detailing how SDG&E determined that its overall fire risk would be reduced 50% per year by maintaining a constant/level tree trimming budget. Spending for enhanced inspections, patrols, and trimming increases by a factor of four from 2019 to 2020 in the 2020 WMP, from \$7.4 million per year to \$28.3 million per year (maximum).¹⁰⁹ This large increase in budget, based on the description in the 2020 WMP, appears almost entirely dedicated to achieving SDG&E's excessive 25-foot tree trimming clearance.¹¹⁰

As POC has provided in the parallel WMP proceedings previously, an expanded inspection program remains eminently achievable and provides demonstrated safety benefits at a cost-effective price, POC calculates the ability to expand physical inspections, conducted by workers, as follows:

SDG&E Tier 3 HFTDs contain only 1,658 miles of distribution transmission lines. One person walking 1 mile per hour, 40 hours per week, could walk 10 percent of this length each month. A crew of five walking 1 mile per hour, 40 hours per week, could visually inspect half of SDG&E's Tier 3 HFTD distribution circuit length every month. Assuming these inspectors are SDG&E employees at a loaded rate of \$120,000 per year, the annual personnel cost of a five-person RoW vegetation inspection crew would total only \$600,000 per year. This amount compares to the proposed \$21 million per year increase in tree trimming costs to cut SDG&E vegetation from the Commission-standard 12-foot vegetation setback to the 25-foot setback proposed in SDG&E's 2020 WMP.

Given the ready availability of more cost-effective alternatives as discussed above, SDG&E has not and cannot show its vegetation practices are cost-effective.

¹⁰⁹ SDG&E 2020 WMP, Appendix A, Table 25.

¹¹⁰ SDG&E 2020 WMP, p. 122.

VII. SDG&E HAS FAILED TO COMPLY WITH COMMISSION DIRECTIVES BECAUSE ITS HARDENING DECISIONS ARE NOT BASED ON REASONABLE OR PROVEN SAFETY CRITERIA.

Section 8386 requires that any hardening activities proposed by the utilities must serve the purpose of ensuring safety, reliability, resiliency:

A description of the actions the electrical corporation will take to ensure its system will achieve the highest level of safety, reliability, and resiliency, and to ensure that its system is prepared for a major event, including hardening and modernizing its infrastructure with improved engineering, system design, standards, equipment, and facilities, such as undergrounding, insulation of distribution wires, and pole replacement.¹¹¹

Moreover, the 2019 SDG&E WMP Decision required SDG&E to “base its decision for pole replacements on reasonable criteria and consider ingress and egress as part of the decision.”¹¹²

SDG&E presents no evidence in its 2020 WMP to support its contention that replacing wood poles with steel poles reduces the potential for the poles to serve as ignition sources. SDG&E simply states that steel poles are more resilient should a fire occur.¹¹³ As SDG&E has effectively admitted in prior discovery in related proceedings, wooden poles themselves have not been identified by CalFire or in any other assessment as an actual or a contributory fire ignition source in any California wildfire.¹¹⁴ SDG&E has repeatedly failed to demonstrate how a wood-to-steel pole conversion would have any impact on reducing fire ignitions.¹¹⁵ Thus replacement of wooden poles with steel poles will not reduce ignitions caused by poles.

¹¹¹ Pub. Util. Code, § 8386, subd. (c)(13).

¹¹² D.19-05-039, p. 7.

¹¹³ SDG&E 2020 WMP, p. 87 (“The new lines are being designed utilizing steel poles instead of wood. Steel poles are a more reliable construction material, giving more confidence in their designed strength, and are more resilient should a fire occur, leading to faster restoration times.”).

¹¹⁴ DRA, 2012 Protest of SDG&E CNF wood-to-steel pole replacement project.

¹¹⁵ See e.g. A.12-10-009, Opening Testimony of Bill Powers, P.E. on Behalf of Protect Our Communities Foundation (September 16, 2015), p. 9-10.

SDG&E incorrectly asserts that wooden poles can withstand winds of only 56 mph, while claiming that steel poles are designed to withstand wind of 85 mph.¹¹⁶ In fact, Commission staff has twice corroborated that wooden poles are designed to withstand 91 mph,¹¹⁷ making them incrementally more resistant to high winds than steel poles which have a maximum wind speed resistance of 85 mph.¹¹⁸

SDG&E's pole replacement program comprises a fantastically expensive and inordinately slow approach to achieving adequate conductor-to-conductor spacing on existing wooden poles. To date, the Commission has considered neither the costs involved nor the effectiveness of SDG&E's pole replacement projects.¹¹⁹ SDG&E's pole replacement program is not and cannot be determined to be cost-effective, because SDG&E could reasonably spend approximately \$10,000 to replace deficient wooden poles with new wooden poles to very rapidly change out the obsolete cross-arms with cross-arms meeting current conductor spacing requirements.¹²⁰ SDG&E's program provides benefits to SDG&E's shareholders at the expense of SDG&E's ratepayers.¹²¹

¹¹⁶ SDG&E 2020 WMP, p. 87.

¹¹⁷ D.12-04-024, p. 15. "Table 1 (GO 95 Wind Load Requirements for the Light-Loading District Selected Grade A Power-Line Elements) shows that a Grade A wood pole must withstand a wind speed of at least 91 mph without failure. CPSD (Consumer Protection and Safety Division) and DRA (Division of Ratepayer Advocates) argue that it is unreasonable for SDG&E to shut off power at 56 mph because this is far below what is required by GO 95."

¹¹⁸ SDG&E 2020 WMP, p. 87.

¹¹⁹ See e.g. D.18-09-024, Order Modifying Decision (D.) 16-05-038, and Denying Rehearing of Decision, as Modified (September 13, 2018), p. 3; General Order 131-D, Section IX.B.1.f. ("...an application for a permit to construct need not include either a detailed analysis of purpose and necessity, a detailed estimate of cost and economic analysis..."); D.20-03-004, p. 30 ("This decision has no bearing on whether the Commission or parties may have concerns about the effectiveness of SDG&E's wildfire mitigation efforts.").

¹²⁰ R.18-10-007, The Protect Our Communities Foundation Comments on Wildfire Mitigation Plan Templates and Related Material (January 7, 2020), p. 10.

¹²¹ https://ww2.energy.ca.gov/pou_reporting/background/difference_pou_iou.html (acknowledging privately owned corporations like SDG&E are obliged to "optimize the return on investment for shareholders"); compare D.16-08-018, p. 195-196 (OP 6) (directing the utilities "to remove shareholders' financial interests from consideration in their risk models and decision frameworks used to support rate

VIII. SDG&E'S UNDERGROUNDING PROPOSALS ARE NOT COST-EFFECTIVE OR FOCUSED ON REDUCING RISK IN THE HIGHEST RISK AREAS.

In addition to requiring that undergrounding activities serve the purpose of ensuring safety, reliability, resiliency,¹²² Section 8386 requires utilities to describe “where and how the electrical corporation considered undergrounding electrical distribution lines within those areas of its service territory identified to have the highest wildfire risk in a commission fire threat map.”¹²³ SDG&E’s 2020 WMP reveals that SDG&E did not consider undergrounding only in its highest wildfire risk areas so as to most effectively reduce risk,¹²⁴ and further that SDG&E failed to consider properly the cost-effectiveness of undergrounding and the viability of alternatives.

SDG&E proposes to spend up to \$451.2 million over the next three years to underground up to 144 miles of distribution lines at the cost of \$3.1 million per mile.¹²⁵ SDG&E purports to have calculated a risk-spend efficiency value of 21.6, but provides no meaningful explanation regarding the inputs and assumptions involved in the calculation.¹²⁶ SDG&E’s failure to do so violates D.18-12-014.¹²⁷ As discussed in Section IV, *supra*, SDG&E’s RSE calculations violate the requirements in D.18-12-014, D.16-08-016, and D.14-12-025 and at best represent a distorted picture of SDG&E’s actual risk reduction strategies.

case expenditure proposals, especially at the operational level, unless the utility can make a good case for an exception in its Risk Assessment Mitigation Phase filing”).

¹²² Pub. Util. Code, § 8386, subd. (c)(13) (“A description of the actions the electrical corporation will take to ensure its system will achieve the highest level of safety, reliability, and resiliency, and to ensure that its system is prepared for a major event, including hardening and modernizing its infrastructure with improved engineering, system design, standards, equipment, and facilities, such as undergrounding, insulation of distribution wires, and pole replacement.”).

¹²³ Pub. Util. Code, § 8386, subd. (c)(14) (“A description of where and how the electrical corporation considered undergrounding electrical distribution lines within those areas of its service territory identified to have the highest wildfire risk in a commission fire threat map.”).

¹²⁴ SDG&E 2020 WMP, p. 86 (“The Strategic Undergrounding efforts will focus on locations within Tier 3 and Tier 2 of the HFTD and the WUI.”).

¹²⁵ SDG&E 2020 WMP, Appendix A, p. 43 (Table 23).

¹²⁶ SDG&E 2020 WMP, Appendix A, p. 43 (Table 23).

¹²⁷ D.18-12-014, Attachment A, p. A-17.

In any event, using common sense, spending \$3.1 million dollars per mile – including in areas outside the areas with the highest fire threat – is not cost-effective.

A far more reasonable alternative would be to eliminate SDG&E’s lines and provide solar + battery systems. The relatively few customers in SDG&E Tier 3 HFTDs should all be equipped with whole house solar plus battery storage to provide for maximum cost-effectiveness, reliability, and safety. Currently, 176,038 net-metered, customer-owned solar systems exist in SDG&E service territory; and many of SDG&E’s Tier 3 HFTD customers already have solar.¹²⁸ The local capacity to install customer-owned solar at a rapid pace in SDG&E’s Tier 3 HFTD already exists. Over 3,800 residential and commercial battery storage systems have been installed since the beginning of 2017.¹²⁹ 30,797 net-metered, customer-owned solar systems were installed in SDG&E service territory in 2019 alone.¹³⁰ The local solar industry could readily install whole house systems at each of the 31,181 customer meters in the Tier 3 HFTD over the three-year 2020-2022 period covered by the 2020 WMP. Providing battery storage capacity to existing solar systems and outfitting the remaining Tier 3 customers with solar + battery systems would be a far more cost-effective approach than approving SDG&E’s limited undergrounding proposal.

¹²⁸ Among SDG&E’s 1,491,258 customers, there were 176,038 net-metered solar projects as of January 31, 2020. See California Distributed Generation Statistics, Statistics and Charts, Data View = “SDG&E”, Data Type = “Projects”, accessed April 4, 2020: <https://www.californiadgstats.ca.gov/charts/>.

¹²⁹ Self-Generation Incentive Program, Statistics, Administrator = “CSE”. accessed April 4, 2020: <https://sites.energycenter.org/sgip/statistics>. Total residential battery storage systems, as of March 31, 2020, installed in SDG&E territory since January 1, 2017 = ~3,700; total commercial systems = ~130.

¹³⁰ California Distributed Generation Statistics, Statistics and Charts, Data View = “SDG&E”, Data Type = “Projects”, accessed April 4, 2020: <https://www.californiadgstats.ca.gov/charts/> (click on blue portion of 2019 bar in bar chart).

The maximum cost to equip 100% of SDG&E's 31,181 Tier 3 customers with whole house battery storage equals approximately \$306 million.¹³¹ The cost to equip all Tier 3 customers with whole house solar + battery comprises a small fraction of the more than \$5 billion it would cost to underground 1,658 miles of distribution lines in Tier 3 HFTDs.¹³²

Customers are installing these systems primarily because they reduce customer electricity costs. Unlike the costs estimated in SDG&E's 2020 WMP, the cost of the whole house solar and battery storage system option should and would be borne by the Tier 3 HFTD customers themselves, and not passed on to SDG&E's ratepayers, generally. In addition, recently expanded Self-Generation Incentive Program (SGIP) programs pay the entire cost of battery systems for low-income customers in Tier 3 HFTDs, and pay a substantial incentive for other customers in HFTDs, further increasing the economic benefits to individual customers.¹³³

The primary threat area involves the Tier 3 HTFD in the mountains to the east of urbanized San Diego County, where the three catastrophic SDG&E-caused fires originated in the 2007. There are only 31,181 customers in SDG&E Tier 3 HFTDs (representing only about 2 percent of SDG&E's total customer base), and only 1,939 AFN and medical baseline customers.¹³⁴

¹³¹ 31,181 customers × \$9,800/customer = \$305,573,800. This calculation uses the 13.5 kilowatt-hour (kWh) Tesla Powerwall as the default battery at a gross installed cost of \$9,800 per retail system. R.12-11-005, Tesla, Inc.'s Opening Comments Responding to Assigned Commissioner's Ruling Seeking Comment on Senate Bill 700 Implementation and Other Program Modifications (May 30, 2019), p. 8, fn. 2 ("A single Tesla Powerwall, with 5 kW and 13.5 kWh, costs approximately \$9,800 in total. This cost estimate reflects the costs of the Powerwall battery unit, supporting hardware and an assumed installation costs of \$2000.").

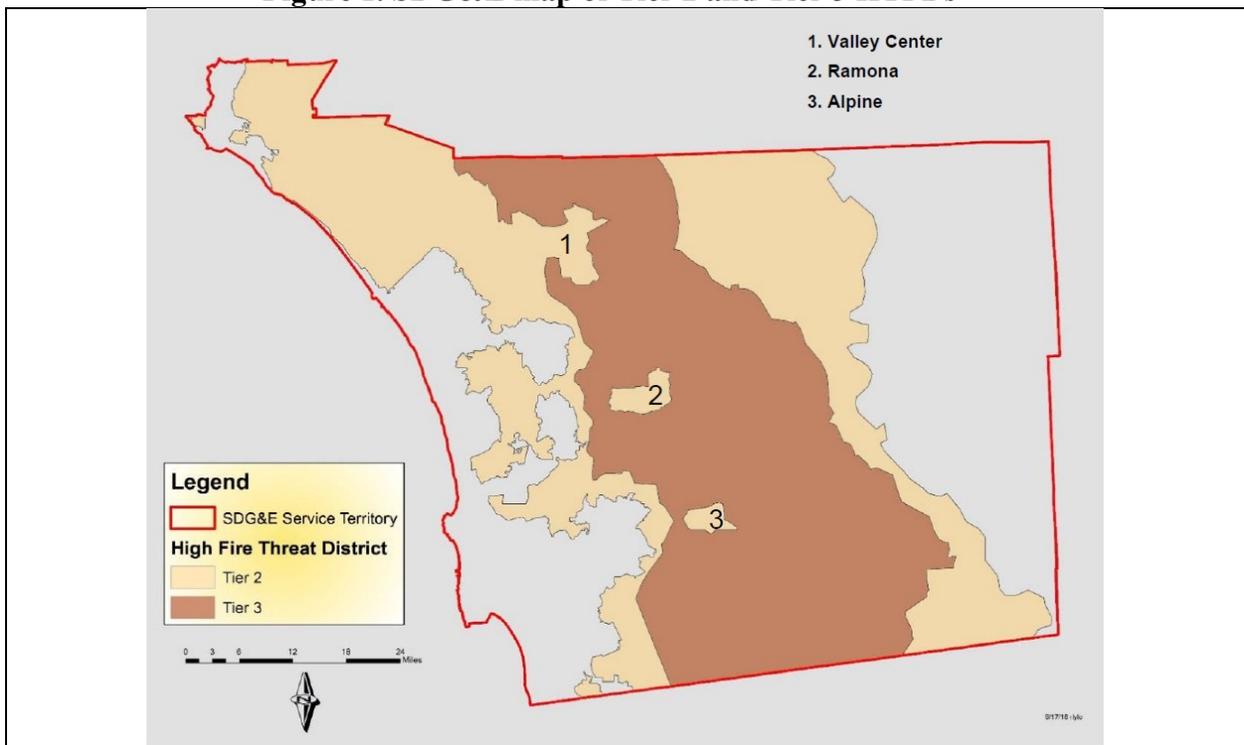
¹³² \$3,133,000 x 1,658 miles = \$5,139,800,000. SDG&E 2020 WMP, Appendix A, p. 43 (Table 23) (spend per mile of proposed undergrounding = \$3,133,000); SDG&E 2020 WMP, Appendix A, p. 21 (Table 13) (SDG&E's service territory includes a total of 1,658 miles overhead distribution lines in Tier 3 HFTDs).

¹³³ D.20-01-021, *Self-Generation Incentive Program Revisions Pursuant to Senate Bill 700 and Other Program Changes* (January 16, 2020), p. 99 (OP 6); p. 102 (OP 19).

¹³⁴ SDG&E 2020 WMP, Table 13, Appendix A, p. 21 (Total SDG&E customers = 1,287,181 (non-HFTD) + 172,896 (Tier 2 HFTD) + 31,181 (Tier 3 HFTD) = 1,491,258.)

Fires that ignite in the remote and difficult-to-access Tier 3 HFTDs can grow to immense size quickly and race toward the coast as out-of-control blazes as they did in 2007. In contrast, outside of the largely urbanized coastal strip, the Tier 2 HFTDs in SDG&E territory are three unincorporated towns on the western edge of the Tier 3 HTFD zone: Alpine, Ramona, and Valley Center. Tier 2 HFTDs should be a substantially lower priority for limited WMP upgrade funds, as they present much lower risk of causing catastrophic wildfires.

Figure 1. SDG&E map of Tier 2 and Tier 3 HFTDs¹³⁵



Note: Town numbers and identifications added to map by Protect Our Communities Foundation.

SDG&E proposes to spend \$900 million or more in its Tier 3 HFTD on wildfire mitigation in the three-year, 2020-2022 period.

¹³⁵ A.19-04-017, SDG&E 2020 Cost of Capital: Exhibit SDG&E-05, Prepared Direct Testimony of Concentric Energy Advisors Wildfire Risk Premium Public Version, p. DW-4.

These proposed expenditures are listed in Table 5. Table 5 includes only the top ten budgetary line items, in terms of cost, from more than twenty budgetary line items described in SDG&E’s 2020 WMP.

Table 5. Estimated 2020-2022 SDG&E WMP top ten expenditures in Tier 3 HFTDs¹³⁶

Budget category	Budget specific to Tier 3? (Y/N)	2020-2022 WMP budget (\$MM)	Tier 3 HFTD Portion of budget (\$MM)	Projected 3-yr risk reduction (%)
Undergrounding ¹³⁷ (144 miles)	Y	451.2	451.2	5.18
Distribution OH hardening/ covered conductor	N	154.6	86.6	1.58 0.42
Drone inspections	N	151.9	85.1	N/A
LTE communication network	N	125.4	70.2	N/A
Tree trimming ¹³⁸	N	100.0	56.0	50.0
Enhanced inspect., patrols, trimming	N	84.5	47.3	5.0
CNF distribution OH hardening	Y	31.6	31.6	1.1
Microgrids ¹³⁹	N	30.8	30.8	0.0
CNF distribution OH underbuild	Y	21.0	21.0	N/A
Pole replacement	N	34.7	19.4	3.1
Total		1,185.7	899.2	

OH: overhead; LTE: long-term evolution; CNF: Cleveland National Forest.

¹³⁶ SDG&E 2020 WMP, Appendix A, p. 31-79 (Tables 21-29).

¹³⁷ This analysis assumes undergrounding exclusively in extreme Tier 3 HFTDs.

¹³⁸ SDG&E 2020 WMP, Appendix A, Table 25 (SDG&E shows a risk reduction benefit of 50% per year for tree trimming, and a cumulative benefit of only 50% for the three-year period. SDG&E uses this same convention for the enhanced “inspection, patrols, and tree trimming” budgetary line item. For equipment inspections and upgrades, such as undergrounding, hardening, and pole replacement, SDG&E adds together the risk reduction in each year to determine the cumulative three-year risk reduction benefit.)

¹³⁹ SDG&E proposes to construct one microgrid in a non-HTFD, one in a Tier 2 HTFD, and another in a Tier 3 HTFD. SDG&E 2020 WMP, p. 80. POC advocates that all microgrid expenditures should be focused on Tier 3 HTFDs which is where wildfire risk is highest.

The calculated risk reduction for each wildfire mitigation measure appears to be a complete shot-in-the-dark – an unsupported number with little accuracy and much precision - and it does not appear to serve the purpose of ensure the most risk reduction per dollar spent or even focus on HFTDs.

SDG&E appears to be masking the lack of basis for the calculated risk reduction by presenting the values in a format, precision to 1/100th of a whole number, which gives the illusion of accuracy. The Commission should thoroughly evaluate all of SDG&E’s Tier 2 proposed expenditures in light of the analytical and data deficiencies contained in SDG&E’s Tier 2 upgrades proposals.

IX. SDG&E HAS FAILED TO COMPLY WITH THE COMMISSION’S DIRECTIVES AND SECTION 8386 REGARDING ITS DE-ENERGIZATION PRACTICES AND SPECIFICALLY WITH RESPECT TO BACKUP GENERATION.

SDG&E also fails to satisfy the de-energization protocols required by Section 8386, which requires WMPs to include “Protocols for the deenergization of the electrical corporation’s transmission infrastructure, for instances when the deenergization may impact customers who, or entities that, are dependent upon the infrastructure.”¹⁴⁰ SDG&E’s deenergization practices comprise another area where the Commission identified deficiencies in SDG&E’s 2019 WMP. The SDG&E 2019 WMP Decision required SDG&E to consider “renewables potentially coupled with storage” for backup generation.¹⁴¹ The SDG&E 2019 WMP Decision also ordered that “[i]f SDG&E does move forward with a Generator Grant Program, it must make a showing to the Commission that it ensures that the Generator Grant Program will not create additional significant risk for fire threat.”¹⁴² In its 2020 WMP, SDG&E failed to comply on both accounts.

¹⁴⁰ Pub. Util. Code, § 8383, subd. (c)(6), (7), (10).

¹⁴¹ D.19-05-039, p. 12.

¹⁴² D.19-05-039, p. 12.

A. Considering Fossil Fueled Generators Without Showing That Fossil Fueled Generators Will Not Create Additional Fire Threats Violates D.19-05-039.

SDG&E appears to be moving forward with what it refers to as a “whole house” generator program without making the showing to the Commission that the program will not create additional significant safety risks, because SDG&E admits that fossil fueled generators are being considered.¹⁴³ Providing gasoline-powered generators completely fail to prevent or even decrease the risk of wildfires, and in fact increase the risk of wildfires.¹⁴⁴ Moreover, the increased risk of fires from gasoline-powered generators, and the gasoline use itself, increase the risks of climate change.¹⁴⁵ Providing gasoline-powered generators not only conflicts with Section 8386, but continues to be entirely unnecessary. Solar + battery alternatives are available and are already deployed by many customers, on their own initiative, in HFTDs.

B. SDG&E Failed to Calculate Risk Spend Efficiencies for its Generator Programs.

SDG&E failed to calculate a risk spend efficient for either its whole house generators or its generator grant programs.¹⁴⁶ D.18-12-014 requires that the risk spend efficiency be calculated. A whole home solar + battery program is a 100% reliable and cost-effective risk reduction mechanism. As set forth below, SDG&E initial generator grant program which it proposes to expand is not cost effective.

¹⁴³ SDG&E Response to Public Advocates Office Data Request: CALPA-SDG&E-02 (March 9, 2020), p. 3 (“...there is still a lot of detail that remains to be developed...SDG&E is currently evaluating a broad range of generators from fossil fuel generators to renewable resources.”).

¹⁴⁴ <https://www.sfchronicle.com/california-wildfires/article/During-PG-E-outages-generators-caused-fires-14833601.php>; see also D.09-09-030, *Decision Denying Without Prejudice San Diego Gas & Electric Company’s Application to Shut Off Power During Periods of High Fire Danger* (September 10, 2009), p. 42 (concluding that “shutting off power increases the risk of fires starting from sources other than power lines” such as portable generators); *id.* at p. 44 (finding a serious fire risk from portable generators and other sources); *id.* at p. 45, 48 (concluding that PSPS events would lead to increased use of generators which themselves are fire hazards).

¹⁴⁵ Pub. Util. Code, § 8386, subd. (c)(3) (programs must “minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks”).

¹⁴⁶ SDG&E WMP, Appendix A, p. 42 (Table 23).

C. SDG&E's Other Generator Grant Programs are Not Cost Effective Because They Do Not Provide Sufficient Backup Power.

The solar plus battery generator apparently used by SDG&E in its pilot program does not suffice as a sufficient back-up power system for customers subject to a PSPS outage. SDG&E's Generator Grant Program appears to be sufficient only for charging cell phones and other portable electronic devices, and it does not provide "whole house" power to home appliances, lights, or air conditioners.¹⁴⁷

SDG&E depicts its system as looking like this:

Viewing Kapil Kulkarni's application

PSGS
GENERATOR GRANT PROGRAM

Launched pilot program in 2019

- 64 participants

Program administered by a neutral third party

- Delivers and trains residential customers on how to use portable generator during PSPS events

2019 pilot participants survey results show:

- Program was well received
- Customers felt more prepared for a PSPS event

Expanding program in 2020

- 1,250 generators within HFTD

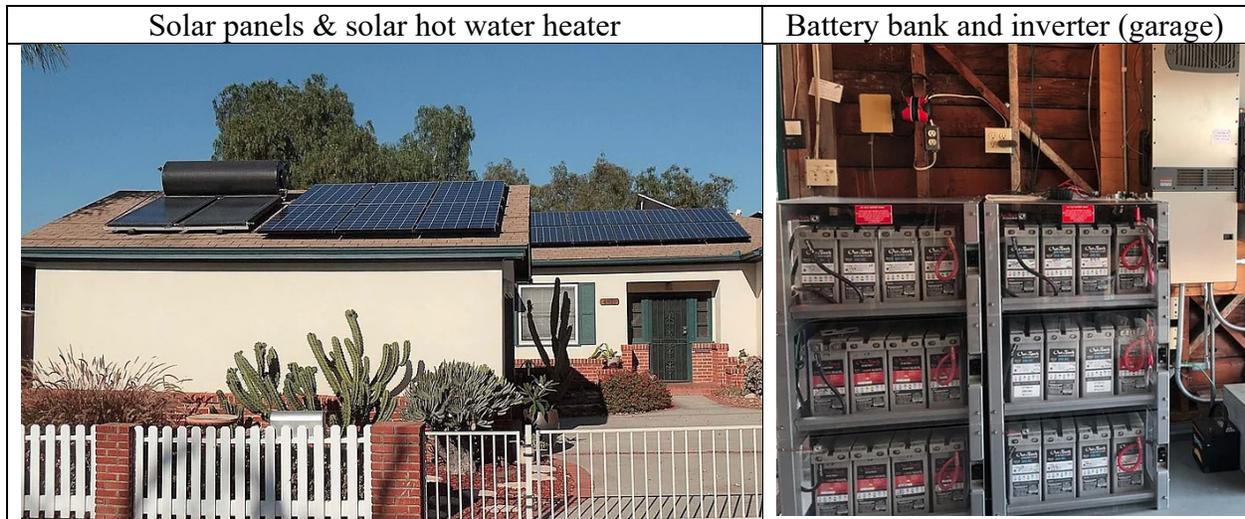
SDG&E
A Sempra Energy company

Building a Better Business

A whole home solar plus battery system, which has 100% reliability during PSPS and year-round, looks like this:¹⁴⁸

¹⁴⁷ SDG&E 2020 WMP, p. 84.

¹⁴⁸ The home pictured is powered by an 8kW solar PV system with 25kWh of useful battery capacity. See short video at: <https://www.10news.com/news/local-news/san-diego-news/green-homes-tour-gives-san-diegans-a-look-at-efficient-options>.



Although SDG&E fails to provide the criteria for its whole house generator program, comparing above photographs reveals that it is highly unlikely SDG&E can establish that its Generator Grant Program is cost-effective within the meaning of D.18-12-014 and D.16-08-018.

D. SDG&E’s Microgrid’s Proposals are Not Cost-Effective.

SDG&E proposes an expensive microgrid proposal in its 2020 WMP that includes one microgrid in the Tier 3 HFTD, another in a Tier 2 HFTD, and a third in a non-HFTD.¹⁴⁹ The Commission denied SDG&E’s application for utility ownership of 100 MW of battery storage at seven substations in its service territory in June 2019,¹⁵⁰ and proposing three microgrids in its

¹⁴⁹ SDG&E 2020 WMP, p. 79-80.

¹⁵⁰ D.19-06-032, p. 11 (“SDG&E proposes to procure 100 MW of storage for seven circuit-level microgrid projects. SDG&E requests a cost cap for the 7 projects, which has an estimated revenue requirement of \$284.6 million.”); p. 12 (“SDG&E proposes to construct the seven utility owned facilities through build-own-transfer agreements following a request for proposal (RFP) process.”); p. 13 (“SDG&E proposes the facilities will be able to participate in the California Independent System Operator (CAISO) market used to provide local resource adequacy to the extent these resources qualify for resource adequacy. SDG&E also expects CAISO participation to generate energy market revenues.”); p. 19 (“LS Power suggests that by eliminating the possibility of other parties’ ownership, SDG&E eliminates a significant proportion of the experienced developers and operators of storage projects.”); p. 21 (“We [the Commission] are compelled by LS Power’s analysis that it would be unreasonable for SDG&E to restrict the RFO to only utility owned projects or to projects located on utility owned property.”); p. 21 (“With a transparent and open RFO process that allows third party and utility owned projects to compete side by side, the concerns about the utility limiting the procurement to only utility owned resources is addressed.”).

2020 WMP is not the appropriate procedural mechanism to modify the Commission's prior rationale. The \$30.8 million budget that SDG&E includes in the 2020 WMP for SDG&E ownership of three microgrids should be eliminated. Instead, all 31,181 meters in the Tier 3 HFTDs be equipped with battery + storage, turning every Tier 3 HTFD structure into a stand-alone mini-microgrid. To the extent microgrids are cost-effective in other areas, SDG&E should issue requests for proposals for these microgrid projects so that the most cost-effective microgrid projects can be ascertained and deployed.

X. CONCLUSION

For all the reasons detailed above, SDG&E's 2020 WMP fails to meet the Commission's mandates in D.19-05-036, D.19-05-039, D.16-08-018, D.18-12-014 and myriad statutory mandates and it should be rejected as insufficient. The Commission should direct further SDG&E to refile and augment its 2020 WMP proposal to provide the required data and analysis necessary to ensure that the Commission can verify that SDG&E's wildfire mitigation plan will in fact assure safety and reliability consistent with California law and policy

/s/ Malinda Dickenson
Malinda Dickenson, General Counsel
The Protect Our Communities Foundation
4452 Park Blvd. #202
San Diego, California 92116
Tel: (858) 521-8492
Email: malinda@protectourcommunities.org
Attorney for The Protect Our Communities Foundation

April 7, 2020